## SUBCHAPTER H: STANDARDS FOR CLASS V WELLS

## §331.131. Applicability.

The rules of this subchapter apply to all new Class V injection wells under the jurisdiction of the Texas Water Commission.

## §331.132. Construction Standards.

- (a) All Class V wells, shall be completed in accordance with the following specifications unless otherwise authorized by the commission.
- (b) For all Class V wells, a form provided by the executive director or the form of the Water Well Drillers Board shall be completed and submitted to the executive director.
- (c) The annular space between the borehole and the casing shall be filled from ground level to a depth of not less than ten (10) feet below the land surface or well head with cement slurry. In areas of shallow, unconfined groundwater aquifers, the cement need not be placed below the static water level. In areas of shallow, confined groundwater aquifers having artesian head, the cement need not be placed below the top of the water-bearing strata.
- (d) In all wells where plastic casing is used, a concrete slab or sealing block shall be placed above the cement slurry around the well at the ground surface.
- (1) The slab or block shall extend at least two (2) feet from the well in all directions and have a minimum thickness of four (4) inches and shall be separated from the well casing by a plastic or mastic coating or sleeve to prevent bonding of the slab to the casing.
  - (2) The surface of the slab shall be sloped to drain away from the well.
- (3) The top of the casing shall extend a minimum of one (1) foot above the original ground surface or known flood elevation.
- (e) In wells where steel casing is used, a slab or block as described in subsection (d)(1) of this section will be required above the cement slurry except when a pitless adapter is used.
  - (1) Pitless adapters may be used in such wells provided that:
- (A) the adapter is welded to the casing or fitted with another suitably effective seal; and

- (B) the annular space between the borehole and the casing is filled with cement to a depth not less than fifteen (15) feet below the adapter connection.
- (2) The casing shall extend a minimum of one (1) foot above the original ground surface or known flood elevation.
- (f) All wells, especially those that are gravel packed, shall be completed so that aquifers or zones containing waters that are known to differ significantly in chemical quality are not allowed to commingle through the borehole-casing annulus or the gravel pack and cause quality degradation of any aquifer zone.
- (g) The well casing shall be capped or completed in a manner that will prevent pollutants from entering the well.
- (h) When undesirable water is encountered in a Class V well, the undesirable water shall be sealed off and confined to the zone(s) of origin.

## §331.133. Closure Standards.

- (a) It is the responsibility of the landowner or person having the well drilled, deepened, or otherwise altered, to plug or have plugged, under standards set forth in these rules, a Class V well which is to be abandoned.
- (b) Closure shall be accomplished by removing all of the removable casing and the entire well filled with cement to land surface.
- (c) In lieu of the procedure in subsection (b) of this section and if the use of a Class V well that does not contain undesirable water is to be permanently discontinued, the well may be filled with fine sand, clay, or heavy mud followed by a cement plug extending from land surface to a depth of not less than ten (10) feet.
- (d) In lieu of the procedure in subsection (b) of this section and if the use of a Class V well that does contain undesirable water is to be permanently discontinued, either the zone(s) containing undesirable water, or the fresh water zone(s) shall be isolated with cement plugs and the remainder of the wellbore filled with sand, clay, or heavy mud to form a base for a cement plug extending from land surface to a depth of not less than ten (10) feet.